CLAIMS

1. (Previously presented) A therapeutic agent for treating diseases associated with an increase in radiation resistance or drug resistance of a cell, said agent comprising an isolated sequence comprising 5'-TCCATGGTGCTCACT-3' (SEQ ID NO:3) wherein said agent reduces radiation resistance or drug resistance of said cell.

2. (Original) The therapeutic agent of claim 1 wherein said agent reduces drug resistance of said cell and further wherein said drug resistance is a resistance to a chemotherapeutic agent.

3. (Previously presented) A method for reducing radiation or drug resistance of a human cell which does not overexpress *HER-2*, said method comprising introducing into said cell an antisense nucleic acid comprising a segment complementary to *HER-2* in an amount effective to reduce said radiation or drug resistance.

4. (Original) The method of claim 3 wherein said cell is a carcinoma cell selected from the group consisting of breast, bladder, prostate, head, neck, lung, colon, pancreas, cervical, ovarian, melanoma and stomach carcinoma cells.

5. (Original) The method of claim 3 wherein said antisense nucleic acid is introduced by association with a targeted liposome.

6. (Original) The method of claim 3 wherein said antisense nucleic acid comprises SEQ ID NO:3.

7. (Original) A method for treating a person with a disease wherein said person is resistant to radiation or drug treatment of said disease, wherein resistance to said radiation or drug treatment is not a result of overexpression of *HER-2*, said method comprising administering to said person an antisense nucleic acid comprising a segment complementary to *HER-2* in an amount effective to decrease said resistance to radiation or drug treatment.

8. (Original) The method of claim 7 wherein said resistance to radiation or drug treatment results from a mutation in or overexpression of a gene selected from the group consisting of *sis* (PDGF-β); *trk*; *met*; *src*; *mos*; *protein kinase C β-1*; *ets-1*; *raf-1*; *Ha-ras*; c-*Fos*; c-*Jun*; c-*myc*; *Shc*; *Grb2*; *Sos*; PLC_γ; and a gene encoding ERK1, ERK2, MEKK, MEK1, MEK2, MAPK, SAPK, MAP2, MAP4, TNF-α receptor, EGF receptor, PKC-α, PC-PLC, PKC-ϵ, an RTK, a TCR-CD3, an STMR, a PTKs, or a G protein.

9. (Withdrawn) The method of claim 8 wherein said gene is *Ha-ras*.

10. (Withdrawn) The method of claim 8 wherein said gene is *raf-1*.

11. (Original) The method of claim 7 wherein said antisense nucleic acid comprises SEQ ID NO:3.

12. (Previously presented) A method for reducing radiation or drug resistance of a human cell which overexpresses *HER-2*, said method comprising introducing into said cell an antisense nucleic acid comprising a segment complementary to *HER-2* in an amount effective to reduce said radiation or drug resistance.

13. (Previously presented) The method of claim 12 wherein said cell is a carcinoma cell selected from the group consisting of breast, bladder, prostate, head and neck, lung, colon, pancreas, cervical, ovarian, melanoma and stomach carcinoma cells.

14. (Original) The method of claim 12 wherein said antisense nucleic acid is introduced by association with a targeted liposome.

15. (Original) The method of claim 16 wherein said antisense nucleic acid comprises SEQ ID NO:3.

16. (Original) A method for treating a person with a disease wherein said person is resistant to radiation or drug treatment of said disease, wherein resistance to said radiation or drug treatment is a result of overexpression of *HER-2*, said method comprising administering to said person an antisense nucleic acid comprising a segment complementary to *HER-2* in an amount effective to decrease said resistance to radiation or drug treatment.

17. (Original) The method of claim 16 wherein said resistance to radiation or drug treatment results from a mutation in or

overexpression of a gene selected from the group consisting of *sis* (PDGF-β); *trk; met; src; mos; protein kinase C β-1; ets-1; raf-1; Ha-ras;* c-*Fos;* c-*Jun;* c-*myc; Shc; Grb2; Sos;* PLC_γ; and a gene encoding ERK1, ERK2, MEKK, MEK1, MEK2, MAPK, SAPK, MAP2, MAP4, TNF-α receptor, EGF receptor, PKC-α, PC-PLC, PKC-ε, an RTK, a TCR-CD3, an STMR, a PTKs, or a G protein.

18. (Withdrawn) The method of claim 17 wherein said gene is *Ha-ras*.

19. (Withdrawn) The method of claim 17 wherein said gene is *raf-1*.

20. (Original) The method of claim 16 wherein said antisense nucleic acid comprises SEQ ID NO:3.

21. (Previously presented) The method of claim 5, wherein said targeted liposome comprises a complex of a ligand and a liposome comprising a mixture of a cationic lipid and a neutral lipid.

22. (Previously presented) The method of claim 21, wherein said liposome comprises a mixture of dioleoyltrimethylammonium-propane (DOTAP) and dioleoylphosphatidylethanolamine (DOPE).

23. (Previously presented) The method of claim 21, wherein said ligand comprises folate or transferrin.

24. (Previously presented) The method of claim 7, wherein said antisense nucleic acid is administered via a targeted

liposome which comprises a complex of a ligand and a liposome comprising a mixture of a cationic lipid and a neutral lipid.

25. (Previously presented) The method of claim 24, wherein said liposome comprises a mixture of dioleoyltrimethylammonium-propane (DOTAP) and dioleoylphosphatidylethanolamine (DOPE).

26. (Previously presented) The method of claim 24, wherein said ligand comprises folate or transferrin.

27. (Previously presented) The method of claim 14, wherein said targeted liposome comprises a complex of a ligand and a liposome comprising a mixture of a cationic lipid and a neutral lipid.

28. (Previously presented) The method of claim 27, wherein said liposome comprises a mixture of dioleoyltrimethylammonium-propane (DOTAP) and dioleoylphosphatidylethanolamine (DOPE).

29. (Previously presented) The method of claim 27, wherein said ligand comprises folate or transferrin.

30. (Previously presented) The method of claim 16, wherein said antisense nucleic acid is administered via a targeted liposome which comprises a complex of a ligand and a liposome comprising a mixture of a cationic lipid and a neutral lipid.

31. (Previously presented) The method of claim 30, wherein said liposome comprises a mixture of dioleoyltrimethylammonium-propane (DOTAP) and dioleoylphosphatidylethanolamine (DOPE).

32. (Previously presented) The method of claim 30, wherein said ligand comprises folate or transferrin.